

IN THE CLAIMS

Please cancel Claims 17-21 without prejudice.

1. (Original) A device comprising at least one nanowire (1) with a surface (1a) and having optical properties, the surface (1a) being provided with at least one binding site (3) able to selectively bind a molecule (2, 4), and a photodetector (12) for detecting the optical properties of the nanowire (1) when the molecule (2, 4) selectively binds to the surface (1a) and for outputting a signal.
2. (Original) A device according to claim 1, wherein the photodetector (12) is a phototransistor.
3. (Previously Presented) A device according to claim 1, wherein the molecule (2, 4) is a biomolecule.
4. (Original) A device according to claim 3, wherein the biomolecule is a luminescent biomolecule, having a first luminescence spectrum.
5. (Previously Presented) A device according to claim 1, wherein the at least one nanowire (1) has a second luminescence spectrum.
6. (Original) A device according to claim 5, wherein the nanowire (1) is such that the first luminescence spectrum is different from the second luminescence spectrum.
7. (Previously Presented) A device according to claim 1, wherein the at least one nanowire (1) furthermore comprises an activator ion.
8. (Previously Presented) A device according to claim 1, wherein the molecule (2, 4) is labelled with a dye (5).

9. (Previously Presented) A device according to claim 1, wherein the device comprises an array of nanowires (1).

10. (Previously Presented) A device according to claim 1, wherein at least a first nanowire (1) is modified with at least one first binding site (3), and at least a second nanowire (1) is modified with at least one second binding site (3), the first and second binding sites (3) binding different molecules (2, 4) from each other.

11. (Previously Presented) A device according to claim 1, wherein at least two nanowires (1) have different sizes.

12. (Previously Presented) A device according to claim 1, wherein the at least one nanowire (1) is dispersed in a liquid to form a suspension.

13. (Original) A device according to claim 12, wherein the suspension of the at least one nanowire (1) is drop-deposited onto a surface.

14. (Previously Presented) A device according to claim 1, wherein the at least one nanowire (1) is grown onto a surface.

15. (Previously Presented) A device according to claim 1, wherein the at least one nanowire (1) is grown into a porous matrix.

16. (Previously Presented) A device according to claim 1, wherein the device is a nanowire sensor for the detection of an analyte (2, 4), wherein the at least one binding site (3) is able to selectively bind an analyte (2, 4), wherein the optical properties of the nanowire (1) are used for analyte (2, 4) detection.

17 - 21. (cancelled).